

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) A moving-image synthesis device comprising:

a synthesis processor which receives a video signal, which includes moving-image data and a moving-image control signal including display timing information of each frame of the moving-image data and processes data-for-synthesis recursively; and

a storage which stores data-for-synthesis, which includes a plurality of items of image-data-for-synthesis and a plurality of items of control-data-for-synthesis associated with the plurality of items of the image-data-for-synthesis:

wherein the synthesis processor further:

reads at least one of the plurality of items of the control-data-for-synthesis from the storage at a timing based on the moving-image control signal ~~as processing A, where the control-data-for-synthesis includes pointer information pointing to the next control-data-for-synthesis and repetition count of current image for synthesis~~;

reads the image-data-for-synthesis ~~associated in accordance~~ with the read control-data-for-synthesis from the storage ~~in accordance with the read control data for synthesis as processing B~~ at a timing in accordance with the input timing of the moving-image data;

executes processing to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image ~~as processing C~~; and

~~repeats the processing A through the processing C, thereby producing composite moving image data as processing D.~~

Claim 2. (Currently Amended) The moving-image synthesis device according to Claim 1, wherein

~~if the when the~~ read control-data-for-synthesis includes repetition count information the read control-data-for-synthesis includes repetition count information indicating that the repetition count is one or more.

~~the synthesis processor processing data-for-synthesis will use the read control-data-for-synthesis that was previously read for a number of successive repetitions of processing data-for-synthesis equal to the repetition count of the control-data-for-synthesis; and~~

~~the synthesis processor processing data-for-synthesis will not need to perform the step of reading at least one of the plurality of items of the control-data-for-synthesis from the storage at a timing based on the moving-image control signal, where the control-data-for-synthesis includes pointer information pointing to the next control-data-for-synthesis and repetition count of current image for synthesis.~~

~~specifying that the processing B and the processing C be repeated more than once, the synthesis processor repeats the processing B and the processing C for the repetition count before executing the processing D.~~

Claim 3. (Currently Amended) The moving-image synthesis device according to Claim 1, wherein

~~the pointer information each of the items of the control-data-for-synthesis stored in the storage includes pointer information indicating an item of indicates the control-data-for-synthesis to be read used for next data-for-synthesis processing, synthesis processing; and~~

~~in the processing A through the processing C repeated in the processing D, the control-data-for-synthesis read from the storage is the item of the control data-for-synthesis indicated by the pointer information.~~

Claim 4. (Currently Amended) The moving-image synthesis device according to Claim 1, wherein

each of the items of the control-data-for-synthesis stored in the storage includes display position information and display size information of the image-data-for-synthesis associated with the control-data-for-synthesis; and

~~in the processing C, the synthesis processor overlays an image-for-synthesis of a size based on the display size information in a position based on the display position information.~~

Claim 5. (Original) The moving-image synthesis device according to Claim 1, wherein the moving-image control signal includes information of a frame rate of the moving-image data; and
the synthesis processor controls the reading of the control-data-for-synthesis from the storage in accordance with the frame rate.

Claim 6. (Currently Amended) The moving-image synthesis device according to Claim 1, wherein

the moving-image control signal includes information of a frame rate of the moving-image ~~data~~ data; and

~~when the where the frame rate of the moving-image data is $N \times M$, where N and M are respectively positive integers, N is the effective motion of the composite image and M is the repetition count of the current image for synthesis which is included in the control-data-for-synthesis; and processing A through the processing C is M ;~~

~~if the when the frame rate is multiplied by L/M , where L is a positive integer, to be set to the frame rate is effectively $N \times L$, the synthesis processor multiplies the repetition count effectively used for reading at least one of the plurality of items of the stored control-data-for-synthesis at a timing based on the moving-image control signal is L of the processing A through the processing C by L/M to set the repetition count to L .~~

Claim 7. (Currently Amended) The moving-image synthesis device according to Claim 1, wherein the ~~processing~~ processing C by the synthesis processor to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image further includes;

processing to attenuate amplitude levels of the moving-image data and the image-data-for-synthesis and add the attenuated amplitude levels of the moving-image data and the image-data-for-synthesis.

Claim 8. (Currently Amended) The moving-image synthesis device according to Claim 7, wherein the synthesis processor has a function to adjust an attenuation rate of the amplitude level of the moving-image data and an attenuation rate of the amplitude level of the image-data-for-synthesis.

Claim 9. (Currently Amended) The moving-image synthesis device according to Claim 7, wherein the synthesis processor selectively outputs any of the moving-image data, the image-data-for-synthesis, and the image data obtained from the processing of adding.

Claim 10. (Currently Amended) A moving-image synthesis method comprising the steps of:

storing data-for-synthesis, which includes a plurality of items of image-data-for-synthesis and a plurality of items of control-data-for-synthesis associated with the plurality of items of the image-data-for-synthesis, ~~as a step A;~~

receiving a video signal, which includes moving-image data and a moving-image control signal including display timing information of each frame of the moving-image data, ~~as a step B;~~
and

processing data-for-synthesis recursively which further comprises:

reading at least one of the plurality of items of the stored control-data-for-synthesis at a timing based on the moving-image control signal, where the control-data-for-synthesis includes pointer information pointing to the next control-data-for-synthesis and repetition count of current image for synthesis, ~~as a step C;~~

reading the image-data-for-synthesis associated in accordance with the read control-data-for-synthesis ~~from the plurality of items of the stored image data for synthesis in accordance with the read control data for synthesis,~~ as a step D at a timing in accordance with the input timing of the moving-image data; and

executing processing to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image, ~~as a step E;~~ and

—repeating the step C through the step E, thereby producing composite moving-image data, as a step F.

Claim 11. (Currently Amended) The moving-image synthesis method according to Claim 10, wherein

~~the pointer information of the each of the items of the stored control-data-for-synthesis includes pointer information indicating an item of~~ indicates the control-data-for-synthesis to be used for read for the next data-for-synthesis processing;

~~the control data for synthesis read in the step C through the step E repeated in the step F are the control data for synthesis pointed at by the pointer information.~~

Claim 12. (Original) The moving-image synthesis method according to Claim 10, wherein

the moving-image control signal includes information of a frame rate of the moving-image data; and

the reading of the stored control-data-for-synthesis is controlled in accordance with the frame rate.

Claim 13. (Currently Amended) The moving-image synthesis method according to Claim 10, wherein

the moving-image control signal includes information of a frame rate of the moving-image data; and where

~~when the frame rate of the moving-image data is $N \times M$, where N and M are respectively positive integers, and the repetition count of the step C through the step E is M ,~~ N is the effective motion of the composite image and M is the repetition count of the current image for synthesis which is included in the control-data-for-synthesis; and

~~if the when the frame rate is multiplied by L/M , where L is a positive integer, the frame rate is effectively to be set to $N \times L$, the repetition count~~ effectively used for reading at least one of

the plurality of items of the stored control-data-for-synthesis at a timing based on the moving-image control signal of the step C through the step E is multiplied by L/M to be set to L.

Claim 14. (Currently Amended) The moving-image synthesis method according to Claim 10, wherein

~~if the when the~~ read control-data-for-synthesis includes repetition count information indicating that the repetition count of the step D and the step E is one or more,

processing data-for-synthesis will use the read control-data-for-synthesis that was previously read for a number of successive repetitions of processing data-for-synthesis equal to the repetition count of the control-data-for-synthesis; and

processing data-for-synthesis will not need to perform the step of reading at least one of the plurality of items of the stored control-data-for-synthesis at a timing based on the moving-image control signal, until the number of successive repetitions of processing data-for-synthesis is equal to the repetition count of the control-data-for-synthesis, the step D and the step E are repeated for the repetition count before the step F is executed.

Claim 15. (Currently Amended) The moving-image synthesis method according to Claim 10, wherein executing processing to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image the step E includes further includes:

processing to attenuate amplitude levels of the moving-image data and the image-data-for-synthesis and add the attenuated amplitude levels of the moving-image data and the image-data-for-synthesis.

Claim 16. (Currently Amended) An information terminal apparatus with a moving-image synthesis function, comprising:

an image pickup device which generates a video signal, which includes moving-image data and a moving-image control signal including display timing information of each frame of the moving-image data;

a synthesis processor which receives the video signal and processes data-for-synthesis recursively;

a storage which stores data-for-synthesis, which includes a plurality of items of image-data-for-synthesis and a plurality of items of control-data-for-synthesis associated with the plurality of items of the image-data-for-synthesis; and

a videophone processor which has a function to send composite moving-image data; wherein the synthesis processor further:

reads at least one of the plurality of items of the control-data-for-synthesis from the storage at a timing based on the moving-image control signal, where the control-data-for-synthesis includes pointer information pointing to the next control-data-for-synthesis and repetition count of current image for synthesis as processing A;

reads the image-data-for-synthesis associated in accordance with the read control-data-for-synthesis from the storage at a timing in accordance with the input timing of the moving-image data as processing B; and

executes processing to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image as processing C; and
~~repeats the processing A through the processing C, thereby producing composite moving-image data as processing D.~~

Claim 17. (Original) The information terminal apparatus with the moving-image synthesis function according to Claim 16, further comprising a data-for-synthesis input section for supplying the storage with the data-for-synthesis.

Claim 18. (Currently Amended) An information terminal apparatus with a moving-image synthesis function, comprising:

a video signal input section which receives a video signal, which includes moving-image data and a moving-image control signal including display timing information of each frame of the moving-image data;

a synthesis processor which receives the video signal and processes data-for-synthesis recursively;

a storage which stores data-for-synthesis, which includes a plurality of items of image-data-for-synthesis and a plurality of items of control-data-for-synthesis associated with the plurality of items of the image-data-for-synthesis; and

an image display section which displays an image based on composite moving-image data;

wherein the synthesis processor further:

reads at least one of the plurality of items of the control-data-for-synthesis from the storage at a timing based on the moving-image control signal, where the control-data-for-synthesis includes pointer information pointing to the next control-data-for-synthesis and repetition count of current image for synthesis as processing A;

reads the image-data-for-synthesis associated in accordance with the read control-data-for-synthesis from the storage at a timing in accordance with the input timing of the moving-image data read control-data-for-synthesis as processing B; and

executes processing to synthesize one frame of the moving-image data and the read image-data-for-synthesis forming a composite image as processing C; and

repeats the processing A through the processing C, thereby producing composite moving-image data as processing D.

Claim 19. (Original) The information terminal apparatus with the moving-image synthesis function according to Claim 18, further comprising a data-for-synthesis input section for supplying the storage with the data-for-synthesis.